# F. New Technologies

One of the major benefits of telecommunications competition is the development and accelerated deployment of new switching and transmission technologies. CLECs, including TCI's affiliates, are among those bringing new technologies to local exchange services. These new technologies are already showing promise for access services. None of the commenters questioned the value of new technologies.<sup>69</sup>

In creating ground rules for treatment of costs in access services, the Commission should tailor its cost treatment to the character of the new technology. TCI was one of a group of parties who agreed that the Commission's treatment of the costs of new technologies should be driven by their cost characteristics, rather than by hard and fast rules. Rigid rules could, in some instances, discourage innovation by preventing innovators from recovering fair and reasonable costs. Given the great variety of potential new technologies, a case-base-case approach, therefore, is essential. Although many new technologies may not change how access has traditionally been provided, other innovations may add to or change how access is provided. In those instances, the rate elements, the costs flowing from them, and the resulting rates should be reflected in the access charge rules.

#### G. Regulatory Approach

In order to foster the development of substantial competition for interstate access services, the Commission's approach to access reform and regulation should recognize the

<sup>&</sup>lt;sup>69</sup>Several commenters emphasized the importance of new technologies, including ISDN. See Comments of Northern Arkansas Telephone Co. at 2; Comments of Microsoft Corp. at 2, 6; Comments of the Information Industry Association at 2.

<sup>&</sup>lt;sup>70</sup>TCI Comments at 24-25; Sprint Comments at 32 (Rate structure should mirror cost characteristics.); PacTel Comments at 73 (Strict or uniform rules do not permit cost recovery and would stifle development). See also SNET Comments at 41-42 (The Commission should allow flexibility for new technologies and regulate services rather than technological platforms.).

qualitatively different levels of competitive pressure faced by ILECs and CLECs.<sup>71</sup> While TCI generally favors relying on competitive market forces where possible, ILECs face insufficient competition in their access service markets to eliminate the need for regulation of ILEC services.<sup>72</sup>

Unlike CLECs, ILECs continue to enjoy significant competitive advantages over competitors by virtue of their control over essential facilities, dominant market share, and incumbent status reinforced by years of franchise monopolies -- all of which confer market power. As TCI and many other parties have maintained, a market-based approach to ILEC regulation that relies on the uncertain progress of nascent competition would prematurely allow, among other things, pricing flexibility that would give ILECs the ability and incentive to price anticompetitively. Thus, TCI agrees with the point made by SpectraNet that premature relaxation of ILEC access charge regulation will substantially affect the scope, timing, and economic feasibility of facilities-based competition in the local exchange and access service markets.

Consequently, and contrary to certain comments,<sup>76</sup> the Commission should retain the current regulatory requirements for all dominant ILECs because they continue to have market

<sup>&</sup>lt;sup>71</sup>NPRM, ¶ 140.

<sup>&</sup>lt;sup>72</sup>TCI Comments at 25-33.

<sup>&</sup>lt;sup>73</sup>See Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations, First Report and Order, 85 FCC 2d 1, 21 (1980).

<sup>74</sup>TCI Comments at 27; see also MCI Comments at 55-56; CompTel Comments at 11.

<sup>&</sup>lt;sup>75</sup>Comments of SpectraNet International, Inc. at 2 ("SpectraNet Comments").

<sup>&</sup>lt;sup>76</sup>See, e.g., USTA Comments at 26; Bell Atlantic/NYNEX Comments at 6-7; SNET Comments at 17; SWBT Comments at 26.

power. The Commission should not begin the process of reducing these requirements for any ILEC until the ILEC demonstrates substantial competition on a service-by-service basis in a defined geographic area by an analysis of the competitive factors used to assess the level of competition in the long distance market before deregulating AT&T's services.<sup>77</sup>

# 1) The proposed market-based approach

TCI and many other parties have also pointed out that the proposed market-based approach, in particular, the proposed Phase I and Phase II triggers, would provide no assurance that ILECs would face sufficient competition or that increased pricing flexibility would promote efficiency and be in the public interest. The proposed Phase I, for example, centers on the availability of unbundled network elements and transport and termination services. As several commenters noted, the mere availability of unbundled network elements at forward-looking prices only signifies that regulatory barriers have been removed in order to permit competitive entry. Removal of such entry barriers is necessary to allow competition to develop, but is not sufficient to ensure the rapid development of competition in the access service market. The availability of these inputs is no guarantee that CLECs and others will be able to produce outputs of local and exchange access services at competitive prices that constrain ILEC market power.

Commenters also point out that few states have yet established permanent prices for unbundled networks. In addition, the nominal availability of unbundled network elements will

<sup>&</sup>lt;sup>77</sup>NPRM, ¶ 150.

<sup>&</sup>lt;sup>78</sup>MCI Comments at 45; API Comments at 16-18; CompTel Comments at 4; Alabama PSC Comments at 12; Comments of the Telecommunications Resellers Association at 8 ("TRA Comments").

<sup>&</sup>lt;sup>79</sup>NPRM, ¶¶ 168-176.

<sup>80</sup> See, e.g., AT&T Comments at 44; API Comments at 10; Sprint Comments at 41; CompTel Comments at 4.

exert competitive pressure on ILEC switched access service only if CLECs are able to obtain logical combinations of network elements.<sup>81</sup> Despite the requirements of the Commission's rules and the 1996 Act, for instance, several commenters report that ILECs have resisted requests by CLECs to combine ILEC-supplied unbundled network elements and have imposed other restrictions on their ability to gain access to unbundled network elements.<sup>82</sup>

Many CLECs will necessarily rely initially on ILECs for unbundled network elements. A CLEC that relies on unbundled network elements can constrain ILEC market power over switched access service only if regulation prevents the ILEC from raising the price or restricting the supply of those network elements. So long as CLECs must rely on ILEC network elements, ILECs will retain market power over the supply of these inputs. It they can exercise market power over network elements and interconnection, ILECs also will be able to exercise market power over access service pricing despite the presence of CLEC competition in the access services market.

Moreover, as TCI explained, ILECs would be likely to use increased pricing flexibility under price caps to limit competition rather than to promote efficient, cost-based pricing.<sup>85</sup>

<sup>81</sup> See, e.g., AT&T Comments at 45; CompTel Comments at 4-5; Sprint Comments at 34-35.

<sup>82</sup> See e.g., MCI Comments at 37-41; CompTel Comments at 10; Comments of Teleport Communication Group, Inc. at 44-45 ("TCG Comments").

<sup>83</sup>AT&T Comments, Attachment at 17.

<sup>84</sup>Some ILECs claim that they will not be able to exercise market power because alternative providers will be able to purchase unbundled elements at cost and attract customers with lower rates without maintaining a physical presence in the customers' serving areas. See, e.g., Bell Atlantic/NYNEX Comments at 45. This argument ignores the operational difficulties that CLECs will face when they begin to provide service using unbundled network elements purchased from ILECs. It also ignored the fact that CLECs would continue to be dependent upon ILEC facilities. Thus, ILECs' control over bottleneck facilities would remain unchanged.

<sup>85</sup>TCI Comments at 28.

Other parties supported and amplify TCI's position.<sup>86</sup> Specifically, commenters pointed out that ILECs would have the incentive to geographically deaverage access prices, and set volume and term discounts strategically to limit the development of competition by targeting price reductions for areas and customers, not where costs are lowest, but where they faced the greatest threat of competition.<sup>87</sup> That, in turn, would give ILECs room under price caps to exercise increased market power by raising prices to areas and customers where competitive threats are minimal. Flexibility to introduce new services outside of price caps could be "gamed" to allow ILECs to exercise increased market power for both the "new" service and a close substitute that nominally remained subject to price cap limits.<sup>88</sup>

As new entrants, CLECs lack the established, ubiquitous networks amassed by the ILECs. CLECs must compete with ILECs that have had decades to develop their networks, customer bases, and technical expertise; to acquire skilled personnel; and to generate goodwill as the dominant provider of local telecommunications services -- without the threat of competition and generally with their return on investment guaranteed by ratepayers.

# 2) Deregulation in the presence of substantial competition

TCI commented that only when an ILEC demonstrates that substantial competition actually exists for a particular service in a particular geographic area should that service be removed from price cap and tariff regulation.<sup>89</sup> Clearly, no such showings could be made now. When the time to consider deregulation of ILEC access service is ripe, TCI, as discussed in its

<sup>86</sup>AT&T Comments at 77-78; MCI Comments at 46-48.

<sup>87</sup>API Comments at 9-10; TRA Comments at 10.

<sup>88</sup>MCI Comments, Attachment at 21-22.

<sup>89</sup>TCI Comments at 29.

Comments and below, supports basing the evaluation of competition on factors similar to those the Commission used to evaluate the competition faced by AT&T in interexchange service markets.<sup>90</sup>

ILECs have proposed an alternative analysis that would be inadequate to determine whether competition is sufficient to replace regulatory constraints on ILEC pricing. ILECs argue that effective interconnection agreements and satisfaction of competitive checklist conditions, together with the existence of a competing access service provider, regardless of market share, is sufficient to justify removal of regulation of ILEC access pricing. Interconnection agreements, the availability of the unbundled network elements, and other checklist conditions, are necessary for the introduction of competition, but do not ensure the development of competition. Indeed, as stated earlier, satisfaction of these items would only demonstrate that a particular barrier to entry has been lowered, not that overall conditions of entry are sufficiently easy to prevent ILECs from exercising market power.

Bell Atlantic and NYNEX suggest that their position is supported by the 1992 Department of Justice/Federal Trade Commission Horizontal Merger Guidelines.<sup>92</sup> To the contrary, before accepting a claim that entry is sufficiently easy to prevent the exercise of market power, the 1992 Guidelines require a detailed showing addressing each of three separate criteria: it must be shown that "entry would be timely, likely, and sufficient in its magnitude, character and scope to deter or counteract the competitive effects of concern." Such a showing cannot be

<sup>90</sup>TCI Comments at 29. See also Ameritech Comments at 27; Bell South Comments at 25; TRA Comments at 26.

<sup>91</sup> See, e.g., Bell Atlantic/NYNEX Comments at 53-54; PacTel Comments at 26; SWBT Comments at 27-28.

<sup>92</sup>Bell Atlantic/NYNEX Comments at 52.

<sup>93</sup>U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, paragraph 3.0 (Apr. 2, 1992), reprinted in 4 Trade Reg. Rep. (CCH) ("1992 Merger Guidelines").

made by mechanically pointing solely to the indicia offered by the ILECs, while ignoring any analysis or evidence of how other factors affect the ability of new carriers to enter and effectively constrain ILEC market power.

Before lifting its regulation of AT&T interexchange services, for example, the Commission required evidence of *actual* competition. It was not satisfied with a promise that competition would develop in the future based on unsubstantiated claims of easy entry. Thus, the Commission has traditionally required that parties demonstrate that a service or market is fully competitive in order to justify deregulation. It should not deregulate ILEC access services based on bare assertions by the ILECs. A satisfactory competitive analysis requires a careful examination of a variety of factors and indicators as to the extent of competition.

# 3) <u>Competitive factors</u>

TCI supported deregulating ILEC access service pricing only after a full and careful analysis of the competitive conditions faced by ILECs. That analysis should include many of the same factors the Commission evaluated when deregulating AT&T, including demand responsiveness, supply responsiveness, market share, and the number of competing firms in the relevant market. Many parties agree that the Commission's traditional analysis should be used for deregulating the access service market.<sup>95</sup>

<sup>94</sup> See TCG Comments at 46; API Comments at 19-20; see also Competition in the Interstate Interexchange Marketplace, 6 FCC Rcd 5880 (1991).

<sup>&</sup>lt;sup>95</sup>See, e.g., API Comments at 19; TRA Comments at 26; TCG Comments at 46; Ameritech Comments at 27; BellSouth Comments at 25.

Ameritech and BellSouth, however, discourage reliance on market share as a reliable indicator of market power. While market share should not be the only factor, it should always be a factor when the Commission considers deregulating a market. A carrier's level of market share is indicative of its level of market power. Market share, considered in combination with supply and demand responsiveness and the number of competing facilities-based providers, would help determine whether ILECs continue to exercise market power. A high market share, for example, will denote market power unless there are many new entrants offering competitive prices and quality. Consequently, market share should remain an indicator of whether a market is competitive.

Some ILECs argue that the criteria for deregulation in the presence of competition should be simply an effective interconnection agreement and the presence of a resale or facilities-based competing carrier.<sup>102</sup> These ILECs propose that evidence of actual competition could be

(Footnote continued to next page)

<sup>&</sup>lt;sup>96</sup>Ameritech Comments at 30 (the FCC should consider a declining market share as corroboration of a competitive showing, but otherwise consider it in connection with deregulation requests); BellSouth Comments at 27 (high market share does not denote market power).

<sup>&</sup>lt;sup>97</sup><u>Accord</u>, API Comments at 19-21 ("Market share measurements are crucial whenever regulatory relief is proposed for dominant carriers.").

<sup>&</sup>lt;sup>98</sup>Interexchange Order, 6 FCC Rcd at 5889-90; Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CC Docket No. 96-128; FCC 96-388, para. 231, n. 763 (rel. Sept. 20, 1996).

<sup>991992</sup> Merger Guidelines at para. 3.0.

<sup>100&</sup>lt;sub>Id</sub>

<sup>&</sup>lt;sup>101</sup>TCI notes that, although Ameritech and BellSouth opposed including market share as a competitive factor, they requested that the Commission consider market share as long as ILEC market shares are declining. Ameritech Comments at 30; BellSouth Comments at 27.

<sup>&</sup>lt;sup>102</sup>USTA Comments at 29 (markets are substantially competitive when there are effective interconnection agreements and a competing carrier); SWBT Comments at 27 (markets are competitive when there are operational competing networks and the exchange of minutes under reciprocal compensation arrangements); PacTel

demonstrated through criteria such as the number of minutes of use exchanged with competitors, the number of NXX codes assigned to CLECs, a listing of services offered by competitors, and a description of the geographic area that they serve. Such factors may provide some relevant evidence for a competitive analysis, but only if they are considered along with the Commission's traditional competitive factors, not in lieu of them. Such criteria alone are not an adequate substitute for a fuller analysis of the factors the Commission, in particular, and economists, in general, have traditionally used to evaluate competitive conditions. As discussed above, it is important that any analysis carefully consider market conditions and market definition. Simple factors, such as those proposed by ILECs, would ignore the extent to which competitive conditions varied among specific services and groups of customers, as well as across different geographic areas.

#### H. Universal Service

Many commenters recognized that the reform of universal service support mechanisms requires offsetting adjustments to access charge price caps. Although price-cap ILECs and independents downplayed the issue, other parties generally shared the Commission's concern -- and TCI's -- that ILECs will receive double recovery if access charges are not adjusted to reflect changes in the universal service mechanisms.<sup>104</sup>

TCI outlined how ILECs could realize excessive recovery if the reform of access charges and price caps for access charges do not take into account the revenue effects on ILECs of

<sup>(</sup>Footnote continued from previous page)

Comments at 26 (there is substantial competition in the presence of interconnection agreements, unbundled elements or other services, and the exchange of minutes).

<sup>&</sup>lt;sup>103</sup>See, e.g., USTA at 29; SNET Comments at 21.

<sup>104</sup>See NPRM, ¶ 244; TCI Comments at 33.

changes in universal service support mechanisms.<sup>105</sup> As one example, non-pool ILECs, under the Joint Board's recommendation, would be relieved of the obligation to use access charge revenues to fund Long Term Support ("LTS").<sup>106</sup> If price caps are not adjusted to recognize elimination of that obligation, these ILECs would receive a windfall. ILECs could also qualify for support payments from the new universal support funds payments that effectively substitute for implicit subsidies from interstate access charges due to geographic averaging. Again, ILECs could receive a windfall if access charges are not adjusted to reflect this new source of revenue.

The ILECs acknowledge some need to adjust access charges to take account of changes in universal service support, but their brief suggestions appear in several cases to be incomplete or misleading. 107 For example, Ameritech agreed that the CCL charge should be reduced by an amount equal to the eliminated obligation to fund LTS recovery from access charge revenue. 108 Ameritech does not, however, acknowledge the need for any further adjustment to offset increased payments Ameritech would receive from new universal service support mechanisms. Other ILECs, on the other hand, agree that access charges should be adjusted for increased payments that ILECs receive from the new universal service fund. 109 These same ILECs, however, generally fail to acknowledge explicitly that adjustments also should be made for the eliminated obligation to provide LTS support.

<sup>105</sup>TCI Comments at 33-34.

<sup>&</sup>lt;sup>106</sup>Federal-State Joint Board on Universal Service, Recommended Decision, CC Docket No. 96-45, 96J-3 at ¶ 423 (Rel. Nov. 8, 1996).

<sup>107</sup> See, e.g., SWBT Comments at 6; PacTel Comments at 49-50.

<sup>108</sup> Ameritech Comments, Attachment A at 2-5, 7-8.

<sup>109</sup> Bell South Comments at 53; SWBT Comments at 6-7; Bell Atlantic/NYNEX Comments at 61-62.

Many of the same ILECs claim that they should receive credits for the new payments they will be required to make into the new universal service fund, unless those payments are funded by an explicit surcharge. ILECs should not receive credit for these payments unless. at a minimum, they can show that they are actually funded by interstate switched access charges.

Similarly, ILECs should not receive credits in adjustments to price caps for interstate switched access services based on obligations that are incurred as a result of intrastate or interstate services other than switched access. Such a policy would not only allow a windfall but would incorrectly and unfairly shift these costs to interstate switched access service, and thus to interexchange carriers and their customers, which would perpetuate inefficient incentives for bypass and defeat the very purpose of reforming universal service support and removing it from switched access.

Adjustments to price caps, therefore, should be required based on the revenue impact of changes in universal service support. It should not, as an example, provide an opportunity for ILECs to attempt to "true-up" the price cap to embedded costs. An ILEC's recovery under price caps may fall short of separated costs for a variety of reasons quite apart from universal service reform, failure of the ILEC to be efficient, pressure of market forces and bypass opportunities, or the Commission's decision to push interstate switched access charges closer to forward-looking costs and rely on other sources of support for universal service. It would not be appropriate to adjust price caps for the revenue impact of changes to universal service support in order to offset the impact of these other effects on an ILEC's ability to recover.

<sup>110</sup>SWBT Comments at 6; 53-54; Bell Atlantic/NYNEX Comments at 61.

<sup>111</sup> Accord, NARUC Comments at 8.

The Group of State Consumer Advocates suggested that universal service support should not be used to reduce interstate access rates, or any other toll carrier services. Like several other commenters, they fear that IXCs may fail to flow-through to end-users the benefits of reduced access rates. This concern is misplaced. Competitive market conditions for long distance services should limit IXCs' ability to hoard the benefit of access charge rate reductions, particularly if these reforms are phased-in. Furthermore, perpetuating the recognized inefficiency of switched access pricing in excess of forward-looking costs could only deter rather than promote the development of efficient and competitive pricing of long distance services.

The comments of rate-of-return ILECs, and the consultants who support them, reflect a deep anxiety about the loss of inflated access charge revenues. To a letter, they voiced concerns about rural telephone service, where low densities contribute to high cost structures. Conversely, to the extent rural areas hope to realize the benefits of new technologies and services, it is important that these markets are not closed to competition and investment. It would be a mistake, therefore, to impose universal service costs on IPSPs as Frederick & Warinner suggests, 114 or to unduly delay any needed universal service reforms for rate-of-return ILECs.

#### I. <u>Terminating Access</u>

The Commission has suggested that, because the calling party and the IXC have little or no ability to influence the choice of the terminating access provider, terminating access may remain a bottleneck controlled by whatever LEC supplies that access.<sup>115</sup> Nevertheless, the

<sup>112</sup>State Consumer Comments at 60.

<sup>113</sup> See Alaska Comments at 1-2; Comments of John Staurulakis, Inc. at 4-5; N. Mariana Comments at ii.

<sup>114</sup> Frederick & Warinner Comments at 10-12.

Commission observes that high terminating access rates may give IXCs incentive to win the end user as a customer.<sup>116</sup> The Commission sought comment on whether there are factors facing CLECs with respect to terminating access that distinguish non-dominant from dominant carriers.<sup>117</sup>

Economists at Charles River Associates have prepared a statement for TCI analyzing the economics of terminating switched access, which is provided as Attachment A to these Reply Comments. Their analysis identifies a number of market mechanisms which prevent any market failure that would allow non-dominant CLECs to exercise market power over terminating switched access rates. Their analysis predicts that such a failure is not a reliable basis for adopting a policy of regulating terminating access rates of CLECs.

#### 1) Terminating Access Offered by CLECs

TCI maintained that terminating access offered by a CLEC will not act as a bottleneck in a competitive marketplace, as any CLEC customer can instead choose a LEC that charges more reasonable terminating access rates. <sup>119</sup> In other words, the Commission's analysis of a calling party's incentives does not consider the incentives that called parties have because of the value that they place on receiving calls as well as originating them. If, due to high terminating access charges, a called party finds that it is receiving fewer calls, it will have an incentive to choose an

<sup>115</sup>NPRM, ¶ 271.

<sup>116&</sup>lt;sub>Id.</sub>, ¶ 272.

<sup>117</sup> Id., ¶ 279.

<sup>118</sup> Steven R. Brenner, Bridger M. Mitchell, and Padmanabhan Srinagesh, "An Economic Analysis of Terminating Access," Charles River Associates, Inc. (Feb. 14, 1997).

<sup>119</sup>TCI Comments at 35.

access provider that charges more reasonable terminating rates.<sup>120</sup> It follows that CLECs do not possess market power over IXCs needing to terminate calls due to the called party's ability to select an alternative terminating access provider.<sup>121</sup>

Absent a compelling showing that CLECs possess market power over terminating access rates, the Commission should avoid imposing the costs of rate regulation on new entrants. CLECs are presumably non-dominant until proven otherwise, and the Commission should treat them as such. 122 Thus, the Commission should expressly exempt CLECs from access charge regulation. 123

Not surprisingly, comments submitted by the ILECs assert that CLECs should receive the same regulatory treatment as ILECs.<sup>124</sup> The ILECs claim that, to the extent a problem regarding terminating access does exist, it would be common to all providers of terminating access, including CLECs.<sup>125</sup> They argue, therefore, that any terminating access regulations imposed by

<sup>120&</sup>lt;sub>Id</sub>

<sup>121</sup> This analysis is not affected by Section 254(g) of the 1996 Act, which requires IXCs to integrate and average rates between urban and rural subscribers and between subscribers located in different states. 47 U.S.C. § 254(g) (1996). See also Policies and Rules Concerning the Interstate, Interexchange Marketplace -- Implementation of Section 254(g) of the Communications Act of 1934, as Amended, Report and Order, CC Docket No. 96-61, ¶¶ 1, 9 (rel. Aug. 7, 1996) (concluding that Section 254(g) codified the Commission's existing geographic rate averaging rules). The selection of alternative terminating access providers with lower rates by the called party will lower the cost averages and, as a result, the rate averages of the IXC. Section 254(g) also does not apply to charges on called parties, because they are not necessarily subscribers of IXCs or of the same IXC. Accordingly, it is permissible for an IXC to impose charges on called parties as a means by which to internalize the effects of terminating access rates. See Attachment A at § 3.3.

<sup>122</sup> SpectraNet Comments at 7: TRA Comments at 39.

<sup>123</sup>TCI Comments at 37-38; SpectraNet Comments at 7; TRA Comments at 39; API Comments at 43-44.

<sup>&</sup>lt;sup>124</sup>See Ameritech Comments at 52; Bell Atlantic/NYNEX Comments at 42; BellSouth Comments at 86; USTA Comments at 67.

<sup>125&</sup>lt;u>See</u>, e.g., id.

the Commission should apply equally to all terminating access providers. This argument neglects the asymmetric position of the ILEC and the CLECs. The great majority of the ILEC customers have no alternative supplier of terminating access, and in its dominant position, the ILEC has market power over terminating access rates.

#### 2) Terminating Access Offered by ILECs

A few of the ILECs maintain that the current level of competition in the access market is sufficient to adequately ensure just and reasonable terminating access rates. 126 This argument completely ignores the indisputable fact that ILECs already possess market power in the terminating access market as a result of their dominant position in that market. ILECs have market power because most customers lack competitive alternatives for obtaining terminating access. As one commenter explained, "ILECs have the subscriber base and traffic volumes that give them substantial bargaining power over IXCs...." Furthermore, regulating the rates for terminating access provided by an ILEC will constrain the terminating rates that CLECs can charge. For these reasons, the Commission should continue to regulate ILEC access rates. 128

# J. Regulatory Treatment of Originating Access for "Open End" Services

TCI continues to support the view that originating access rates, including access rates for "open end" services, will not act as a bottleneck; therefore, originating "open end" minutes should not continue to be treated as terminating minutes for access charge purposes.<sup>129</sup> For the

<sup>&</sup>lt;sup>126</sup>See, e.g., BellSouth Comments at 84-85 (arguing that interconnection opportunities will act as a sufficient constraint on terminating access rates); SNET Comments at 54 (claiming that there are already alternative access providers available for terminating access); USTA Comments at 67 (asserting that the "availability of substituable terminating and competitive marketplace conditions provide sufficient pricing discipline to constrain terminating access prices").

<sup>127</sup> SpectraNet Comments at 8-9.

<sup>128</sup>TCI Comments at 36.

same reasons that terminating access rates will be subject to competitive pressure, originating "open end" access rates will also respond to the market. As TCI explained in its Comments, an access provider with high originating access charges will discourage businesses from making "open end" services available. 130 In such situations, the calling party would lose the benefit of that service and change to an access provider with lower originating access rates. 131

#### K. Treatment of Internet and ISPs

TCI supported the position of the National Cable Television Association ("NCTA"), <sup>132</sup> which was in agreement with the Commission's tentative conclusion that ISPs should continue to be exempt from the assessment of access charges. <sup>133</sup> Because the imposition of access charges would stifle growth, investment, and innovation in information services, the Commission should not require ISPs to pay access charges. <sup>134</sup>

<sup>&</sup>lt;sup>129</sup>TCI Comments at 38. Cf. ACTA Comments at 24 (supporting the continued treatment of "open end" services as terminating traffic); WorldCom Comments at 93 (arguing that originating "open end" minutes should continue to be treated as terminating minutes).

 $<sup>130</sup>_{Id}$ 

<sup>131&</sup>lt;sub>Id</sub>

<sup>132</sup>*Id*.

<sup>&</sup>lt;sup>133</sup>NPRM, ¶ 283.

<sup>134</sup>Comments of Media Access Project, Center for Democracy and Technology, The Benton Foundation, Electronic Frontier Foundation, and Voters Telecommunications Watch at 2-4; Comments of the Interactive Services Association at 2; Comments of Microsoft Corporation at 4; Comments of Ozarks Technical Community College at 1; Comments of American Library Association at 1; Mariana Comments at 12-13.

# L. Part 69 Revisions

TCI urged the Commission to retain its cost allocation rules for all ILECs, including those contained in Part 69, subparts D and E.<sup>135</sup> TCI explained that premature regulatory flexibility or deregulation could have anticompetitive consequences in light of the ILEC's current market share.<sup>136</sup> Accordingly, TCI requested that the Commission continue to apply its cost allocation rules contained in Part 69, subparts D and E, until there is substantial competition on a service-by-service basis in a defined geographic market.<sup>137</sup>

A few commenters, however, argue that the Commission should eliminate its Part 69 cost allocation rules, claiming such rules prevent the rate flexibility that they would need in a competitive environment. GTE, for example, stated that the current Part 69 cost allocation rules are both "inimical to fair competition and unnecessary." ILECs, like GTE, claim that the Part 69 cost allocation rules are "too rigid" for the new market structure contemplated by the 1996 Act. 140

Although the current Part 69 cost allocation rules may *eventually* be eliminated, the Commission needs to be cautious about lifting regulation before the development of substantial competition. As TCI stated in its Comments, the ILECs' current market dominance, when

<sup>135</sup>TCI Comments at 39-40.

<sup>136</sup>*Id.* at 40.

<sup>137</sup> *Id.* at 39.

<sup>138</sup> See GTE Comments at 47; BellSouth Comments at 88.

<sup>139</sup>GTE Comments at 47.

<sup>140</sup> See GTE Comments at 47; Alltel Comments at 17.

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combined with deregulation, would give them a considerable competitive advantage over

competing access providers before competition has an opportunity to develop. 141

III. **CONCLUSION** 

TCI has offered a balanced and reasonable proposal for reforming access charges.

Among the many comments the Commission has received, TCI genuinely believes that its own

recommendations are the most realistic and economically rational approach. It reflects costs and

cost causation, while moving toward a competitive marketplace. It is the best way to realize the

Commission's goals for access charge reform.

Respectfully submitted,

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141 TCI Comments at 31-33.

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# AN ECONOMIC ANALYSIS OF TERMINATING SWITCHED ACCESS

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February 14, 1997



#### 1. Introduction

In its *Notice of Proposed Rulemaking* in CC Docket No. 96-262 (Access Charge Reform), the Federal Communications Commission asked for comment on an analysis that suggests that, because of a market failure, competition among local carriers is likely to be less effective in constraining the prices of terminating switched access than of originating switched access. It also asked what implications this analysis has for the appropriate regulatory treatment of terminating access services offered by incumbent LECs (at para 273) and non-incumbent (or competitive) LECs (at para 280).

Parties commenting on the *Notice* took a range of positions on these questions. In order to clarify the issues, this paper develops a more detailed analysis of the market for terminating switched access. The fundamental issue underlying the Commission's questions is whether regulatory policy-making can or should be based on the prediction of market failure generated by a simple analysis of terminating access markets.

This paper identifies factors not considered by the simple analysis that could either mitigate or eliminate the predicted market failure: (1) preferences and behavior of end users that would cause them to consider the effects on others of high terminating access rates charged by the local carrier they select; and (2) bargaining and pricing strategies of IXCs that would result in end users feeling the effects of high terminating access prices charged by their local carrier. These factors would generate market forces that could prevent market failure and constrain a CLEC's ability to charge excessive prices. Thus, there is an alternative analysis that does not predict a market failure or any special need for regulation of terminating access supplied by carriers that otherwise face competition.

Even if the Commission is not now prepared to accept the alternative (and more complete) analysis as more accurate, its existence suggests that, at a minimum the Commission should not rely on the simple model until its predictions are borne out by experience. The Commission should refrain from regulating terminating services provided by CLECs until empirical evidence of market failure is available and specific complaints of excessive charges for CLEC terminating access are submitted to the Commission and



found to be justified.

The final section of the paper reviews the implications of this analysis for the appropriate regulation of ILEC terminating access and concludes that regulation of ILEC terminating access can be justified for reasons that have nothing to do with any claimed special properties of markets for terminating switched access.

# 2. The Issue Of Terminating Switched Access

#### 2.1 Institutional Arrangements

Originating access, long distance transport, and terminating access are three important inputs used in the production of long distance calls. LECs have traditionally provided originating switched access (the connection from the calling party's location to an IXC's Point of Presence or POP) and terminating switched access (the connection from a second POP to the called party's location) to IXCs. An IXC has traditionally provided long distant transport between its POPs, combined that transport with originating and terminating access purchased from LECs, and sold the final good (long distance calling) to end users.

Long distance service is supplied by a substantial number of competing IXCs.

Terminating and originating switched access continue to be provided, in most areas and to most customers, only by the incumbent LEC. The question is, how will markets function if and when end users have the option of choosing from among several suppliers of local service and originating and terminating switched access?

# 2.2 A Simple Analysis Of Terminating Switched Access

The Commission identifies an externality in the market for long-distance calls as a potential source of a market failure: "For terminating access, the choice of service provider is made by the called party. The decision to place the call and payment for the call lies, however, with the calling party. The calling party, or its long-distance service provider, has little or no ability to influence the called party's choice of service provider. Thus, it appears that even with a competitive presence in the market, terminating access

An exception to the rule is the provision of (mostly special) access by Competitive Access Providers to large businesses located primarily in central business districts.



may remain a bottleneck controlled by whichever LEC provides access for a particular customer. As such, the presence of unbundled network elements or facilities-based competition may not affect terminating access charges." (At Para 271). And, "[b]ecause the paying parties do not choose the carrier that terminates their interstate calls, competitive LECs potentially could charge excessive prices for terminating access." (At Para 279).

The source of market failure in this analysis is clear. The effects of a carrier's price for terminating switched access are external to the end user's choice of the carrier that provides terminating access. In this analysis, the price a carrier charges for terminating access affects others, but not the end user choosing the provider and, thus, has no effect on the end user's choice of a provider of terminating access. To the extent market forces eliminate this externality, and therefore end users do consider a carrier's terminating access prices in choosing among local carriers, market failure will be eliminated and terminating access, in the Commission's terms, will not have special bottleneck properties.

In the analysis below, we identify a variety of reasons and market mechanisms that could cause end users to consider the price of terminating access in choosing among local carriers.

# 3. Mechanisms That Cause End Users To Internalize The Effect Of Terminating Access Charges

In this section, we first look at incentives that end users have for considering the effects of high terminating access charges set by a local carrier of their choice. The analysis outlined by the Commission overlooks the effects of such incentives on end users' choices among local access providers and arrangements that reinforce their effect. Second, our analysis points out that IXCs have the incentive and ability to act in ways that cause end users to feel the effects of higher terminating access charges. This contrasts with the analysis outlined by the Commission in which IXCs only passively pay, and pass on to their customers, high terminating access charges.



#### 3.1 Market Forces Generated By End Users' Benefits from Receiving Calls

Many calls benefit the called party as well as the calling party. Thus, an end user will be harmed if he or she receives fewer calls because high terminating access charges raise the price others must pay to call. In competitive long distance markets, the cost of a call (including the costs of originating and terminating access) will be recovered through prices charged by IXCs. If different LECs charge different rates for terminating access, IXCs will face strong competitive pressure to charge higher rates on calls terminated by LECs that charge higher terminating access rates. These differentiated price signals can then influence the calling behavior of calling parties and cause an end user who chooses a carrier that sets high terminating access rates to receive fewer long distance calls.

This influence will be reinforced by arrangements that individuals who call each other frequently can make to overcome what economists have labeled the "call externality." If callers looked at each call in isolation, they would make decisions about whether to call and how long to talk by balancing the cost of placing the call against the benefit they would receive from placing the call. The benefit the called party received would be an externality ignored in this choice. If everyone behaved this way, the externality would result in too little calling. End users who have a long-term relationship can (and often do) internalize this externality by agreeing (informally) to share costs by taking turns calling each other. Under this arrangement, a caller will consider not only the benefits from placing this call and paying for it, but the benefits of receiving the next call at no charge. Such arrangements also mean that the parties share the costs of

The Commission appears to hold the view that Section 254(g) requires that charges for domestic calls must be based on the average terminating access rate for all users served by the IXC (see NPRM at Footnotes 357 and 368). However, recent pricing practices of IXCs include several examples where the price paid to originate a call depends on the identity of the terminating party or the terminating carrier. For example, virtual private network services have offered lower rates for calls that terminate on-net than for calls that terminate off-net. In this case, prices to subscribers vary with the cost of terminating access, and other factors. MCI's "Friends & Family" service offered lower prices to originating callers who placed calls to subscribers in their calling circle than to other parties. And in some out-of-region states where NYNEX offers long distance service, it has advertised lower rates for calls that terminate in NYNEX territory than for calls that terminate in non-NYNEX territory.



<sup>&</sup>lt;sup>2</sup> This tendency is apparent in the increasingly competitive international market, where accounting rates for call termination are a major component of the cost paid by originating U.S. carriers. The price of an international call from the U.S. has traditionally depended on the destination country.

communicating with one another and have a financial incentive in keeping the total costs of their communications low in order to maximize their joint benefit from their ongoing relationship. They can be expected to seek low cost long distance calls. Since the price of terminating access is built into the price of long distance calls, these consumers have an incentive (ceteris paribus) to seek LECs with low terminating access rates.

Most business users will also be sensitive to the terminating access charges of their LECs. A business that selects a LEC with high priced terminating access will drive up the costs of its suppliers, who will have to pay more for long distance calls to it. The suppliers may seek to pass on these costs to the business customer, and the high price of terminating access for these calls might ultimately be paid by the called party. Similarly, high prices of terminating access will drive up the costs of customers who need to call the firm, thereby reducing its competitiveness. Businesses' sensitivity to the cost of being reached by telephone is shown by the willingness of many firms to purchase toll-free (800/888) service in order to reduce the costs others incur in calling them. It may be expected that these firms will not only continue to use 800 service, but will also look at other options that can help them reduce the costs incurred by the parties (including customers) that call them. One such option is to seek service from a LEC that has low rates for terminating access.

When there are multiple LECs who compete to provide terminating switched access, the customer behavior described above (which causes end users to internalize the effects of terminating access prices) can generate downward pressure that moves rates towards costs. The extent of this pressure will depend in part on the proportion of customers whose behavior is responsive to the benefits of received calls and who seek to minimize the total cost of calls in both directions. In a rivalrous market, a relatively small proportion of consumers sensitive to the effects of terminating access prices may be sufficient to prevent excessive rates.

#### 3.2 Interconnection Negotiations Between IXCs And CLECs

IXCs play a passive role in the analysis outlined by the Commission and described above. IXCs pay high terminating access prices, and presumably pass them along in the

